10/648067

# **Refine Search**

# Search Results -

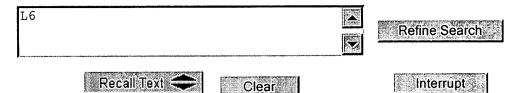
Terms	Documents
L5 and gps	7

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database

Database:

JPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:



# **Search History**

DATE: Tuesday, January 31, 2006 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGF	PB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; THES=ASSIGNEE; PLU	R = YES;	
OP = OR			
<u>L6</u>	L5 and gps	7	<u>L6</u>
<u>L5</u>	L4 and vehicle	16	<u>L5</u>
<u>L4</u>	L3 and map\$	18	<u>L4</u>
<u>L3</u>	L2 and database	21	<u>L3</u>
<u>L2</u>	L1 and navigation	37	<u>L2</u>
<u>L1</u>	(freshness adj (information or data)) and @ad<=20020826	145	<u>L1</u>

END OF SEARCH HISTORY

Record List Display Page 1 of 3

# **Hit List**

First Hit Clear Generate Collection Print Fwd Refs Bkwd Refs

Generate OACS

**Search Results** - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 20050091118 A1

Using default format because multiple data bases are involved.

L6: Entry 1 of 7

File: PGPB

Apr 28, 2005

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20050091118

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050091118 A1

TITLE: Location-Based filtering for a shopping agent in the physical world

PUBLICATION-DATE: April 28, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Fano, Andrew Ernest Evanston IL US

US-CL-CURRENT: <u>705/26</u>

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

File: PGPB

☐ 2. Document ID: US 20030191568 A1

PGPUB-DOCUMENT-NUMBER: 20030191568

PGPUB-FILING-TYPE: new

L6: Entry 2 of 7

DOCUMENT-IDENTIFIER: US 20030191568 A1

TITLE: Method and system for controlling a <u>vehicle</u>

PUBLICATION-DATE: October 9, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Breed, David S. Boonton Township NJ US

US-CL-CURRENT: 701/36; 340/438, 701/213

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 3. Document ID: US 20020198632 A1

L6: Entry 3 of 7

File: PGPB

Dec 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020198632

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020198632 A1

TITLE: Method and arrangement for communicating between vehicles

PUBLICATION-DATE: December 26, 2002

INVENTOR-INFORMATION:

CITY STATE COUNTRY NAME Breed, David S. Boonton Township NJ US DuVall, Wilbur E. Kimberling City MO US Johnson, Wendell C. Signal Hill CA US UA Lukin, Kostyantyn Alexandrovich Kharkov Konovalov, Vladymyr Michailovich Kharkov UA

US-CL-CURRENT: 701/1; 701/213

Full Title Citat	on Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw, De
	**************************************			···						
□ 4. Docu	ment ID:	US 67	68944 B2							
L6: Entry 4	of 7		Fi	le: (	USPT			Jul 27	, 200	) 4 <sup>-</sup>

US-PAT-NO: 6768944

DOCUMENT-IDENTIFIER: US 6768944 B2

TITLE: Method and system for controlling a  $\underline{\text{vehicle}}$ 

Full Title Citation Front Review	Classification Date Reference Sequence	as <mark>Altadinepis Claims KWC Draw D</mark> e
5. Document ID: US 67	20920 B2	
L6: Entry 5 of 7	File: USPT	Apr 13, 2004

US-PAT-NO: 6720920

DOCUMENT-IDENTIFIER: US 6720920 B2

TITLE: Method and arrangement for communicating between vehicles

Full   Title   Citation   Front   Review	u Classification Date	e Reference Sequ	enses (Alienthaneales	Claims	KWMC Drac
☐ 6. Document ID: US 6	336073 B1		<del></del>		
L6: Entry 6 of 7	m! 1	: USPT		Jan 1,	2002

Record List Display Page 3 of 3

US-PAT-NO: 6336073

DOCUMENT-IDENTIFIER: US 6336073 B1

TITLE: Information terminal device and method for route guidance

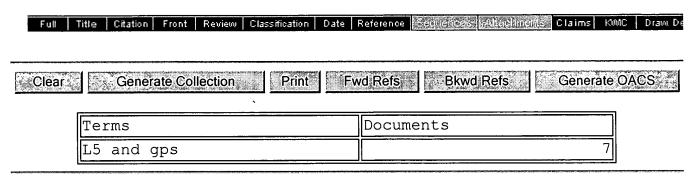
Full Title Citation Front Review	Classification Date Reference	se Sequences Affactments Cla	aims KMC Draw De
☐ 7. Document ID: US 63	17718 B1		
L6: Entry 7 of 7	File: USPT	Nov	7 13 <b>,</b> 2001

US-PAT-NO: 6317718

DOCUMENT-IDENTIFIER: US 6317718 B1

TITLE: System, method and article of manufacture for location-based filtering for

shopping agent in the physical world



Display Format: - Change Format

Previous Page Next Page Go to Doc#

First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print

Y+

L6: Entry 6 of 7

File: USPT

Jan 1, 2002

US-PAT-NO: 6336073

DOCUMENT-IDENTIFIER: US 6336073 B1

TITLE: Information terminal device and method for route guidance

DATE-ISSUED: January 1, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Ihara; Yasuhiro Kobe JP Suzuki; Akihiro Neyagawa JP Nakano; Nobuyuki Toyonaka JP Fukuda; Hisaya Sakai JP

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Matsushita Electric Industrial Co., Osaka-Ltd. 5u JP 03

APPL-NO: 09/626122 [PALM]
DATE FILED: July 26, 2000

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY APPL-NO APPL-DATE

JP 11-215797 July 29, 1999

INT-CL-ISSUED: [07] G01 C 21/00, G08 G 1/096

US-CL-ISSUED: 701/202; 701/208, 701/211, 340/990 US-CL-CURRENT: 701/202; 340/990, 701/208, 701/211

FIELD-OF-CLASSIFICATION-SEARCH: 701/202, 701/201, 701/208, 701/209, 701/210,

701/211, 701/212, 340/988, 340/990, 340/995

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Cl	ear
-------------------------------	-----

 PAT-NO
 ISSUE-DATE
 PATENTEE-NAME
 US-CL

 5543789
 August 1996
 Behr et al.
 340/995

5913918	June 1999	Nakano et al.	701/208
5945976	August 1999	Iwamura et al.	345/139
6006161	December 1999	Katou	701/212
6040824	March 2000	Maekaw et al.	345/173
6041281	March 2000	Nimura et al.	701/211
6073075	June 2000	Kondou et al.	701/203
6115669	September 2000	Watanabe et al.	701/209
6121900	September 2000	Takishita	340/995
6182010	January 2001	Berstis	701/211
6199014	March 2001	Walker et al.	701/211
6202022	March 2001	Ando	701/200
<u>6202026</u>	March 2001	Nimura et al.	701/211

#### FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	CLASS
9-229694	September 1997	JP	
10-103977	April 1998	JP	

ART-UNIT: 3661

PRIMARY-EXAMINER: Nguyen; Tan

ATTY-AGENT-FIRM: Wenderoth, Lind & Ponack, L.L.P.

#### ABSTRACT:

In an information terminal device, a processor receives route information on a route from a start point to a destination and quidance information required for route guidance, in accordance with a standard communications protocol. The processor guides the route from the start point to the destination through an information presentation part by using first cartographic data having a basis on the received route information and the guidance information. The processor requests, as required, a specific information service center for point information in a tag format showing details of each important point (POI) on the route through an information request part. As a result, the processor receives the point information on the important point from the information service center in accordance with the standard communications protocol. The processor presents the received point information on the important point simultaneously with a map based on the first cartographic data to clearly indicate each of the important points on the route. With the aid of the tag format, the information terminal device is capable of receiving, using the standard communications protocol, various information in the suitable format for the route quidance.

20 Claims, 28 Drawing figures

Previous Doc Next Doc Go to Doc#

First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print

 $\lambda_{+}$ 

L6: Entry 6 of 7

File: USPT

Jan 1, 2002

DOCUMENT-IDENTIFIER: US 6336073 B1

TITLE: Information terminal device and method for route guidance

#### Abstract Text (1):

In an information terminal device, a processor receives route information on a route from a start point to a destination and guidance information required for route guidance, in accordance with a standard communications protocol. The processor guides the route from the start point to the destination through an information presentation part by using first cartographic data having a basis on the received route information and the guidance information. The processor requests, as required, a specific information service center for point information in a tag format showing details of each important point (POI) on the route through an information request part. As a result, the processor receives the point information on the important point from the information service center in accordance with the standard communications protocol. The processor presents the received point information on the important point simultaneously with a map based on the first cartographic data to clearly indicate each of the important points on the route. With the aid of the tag format, the information terminal device is capable of receiving, using the standard communications protocol, various information in the suitable format for the route guidance.

# <u>Application Filing Date</u> (1): 20000726

# Brief Summary Text (5):

One example of a conventional information terminal device is disclosed in Japanese Patent Laying-Open No. 9-229694 (1997/229694). FIG. 18 shows a  $\underline{\text{navigation}}$  data adding system 1800 in which a  $\underline{\text{navigation}}$  system 1801, as an exemplary information terminal device, and an additional data providing system 1802 are communicably connected.

# Brief Summary Text (6):

In the <u>navigation</u> system 1801, a storage medium 1803 is implemented by a CD-ROM, for example. The storage medium 1803 stores cartographic data and sightseeing information. A user operation is detected by an input detector 1804 and then recognized by a controller 1807. The user operation is, for example, a selection made on a menu displayed on a display 1805. On receiving the selection, the controller 1807 accesses the storage medium 1803 to fetch the cartographic data and the sightseeing information for display on the display 1805.

#### Brief Summary Text (7):

Next, described is a case where the <u>navigation</u> system 1801 receives, for display, additional data from the additional data providing system 1802 through communications. In such case, the controller 1807 first determines what additional data is to be requested based on screen contents indicating a screen currently being displayed and being stored in a display contents storage 1806. A transmitter 1809 transmits a data request requesting the determined additional data. After transmission of the data request, the additional data transmitted from the additional data providing system 1802 is received by a receiver 1811 and stored in an additional data storage 1810. Thereafter, an image generator 1808 embeds the

additional data in a predetermined template to generate a display screen. Finally, the display screen is displayed on the display 1805.

# Brief Summary Text (8):

On the other end, in the additional data providing system 1802, a data search part 1815 performs a search in response to the data request which is transmitted from the <u>navigation</u> system 251801 and received at the receiver 1812. A data conversion part 1813 converts the search result into a format suitable for communications and a transmitter 1814 transmits the converted data to the <u>navigation</u> system 1801. Further, the additional data providing system 1802 accesses an external network 1819 through a network access part 1817 and receives information therefrom. The received information is sent to a data generator 1818. Based on the received information, the data generator 1818 generates data required as service data. The generated data is stored in a data storage 1816 and provided to the <u>navigation</u> system 1801 through the data search part 1815 as the additional data.

# Brief Summary Text (9):

With such configuration, the <u>navigation</u> system 1801 receives the latest and detailed information from the additional data providing system 1802.

#### Brief Summary Text (10):

As another example of the conventional information terminal device, a car navigation device with a communications function is disclosed in Japanese Patent Laying-Open No. 10-103977 (1998/103977). The car navigation device according to the publication first searches local data and then an access point of an ISP (Internet Service Provider) close to a present location. The car navigation device thus provides detailed information on facilities in the vicinity of the present location to a user by displaying home pages (Web sites) thereof. In specific, according to the invention disclosed in the publication, a WWW (World Wide Web) browsing function, which is normally installed in personal computers, is installed in the car navigation device. The car navigation device internally stores URLs of home pages in correspondences with locations of an owner of the device. In this manner, the car navigation system is able to display detailed information on an arbitrary vicinity area on a map by using the WWW browser, thereby allowing a car navigation system to receive the latest and detailed information.

# Brief Summary Text (11):

The information terminal devices disclosed in the above publications are both capable of receiving the latest and detailed information through the use of the communications function. The information terminal devices, however, each have following problems. Note that in the publications No. 9-229694 (1997/229694) and No. 10-103977 (1998/103977), the <u>navigation</u> system 1801 and the car <u>navigation</u> device respectively serve as the information terminal device.

# Brief Summary Text (12):

First, the problem of the information terminal device according to the publication No. 9-229694 (1997/229694) lies in the fact that the information terminal device (navigation system 1801) and the information server (additional data providing system 1802) communicate using a communications protocol exclusively dedicated thereto in the navigation data adding system 1800. To be specific, the additional data providing system 1802, as its name implies, provides additional information of predetermined contents to the information terminal device as an update. That means, when displaying restaurant information, for example, the information terminal device requests transmission of additional data by designating an information screen number. As such, the information terminal device and the information server are engaged too often.

# Brief Summary Text (14):

On the other hand, the information terminal device of the publication No. 10-103977 (1998/103977) can access enormous amounts of information all over the world by

using a standard communications protocol and the WWW browser. The information terminal device, however, is only capable of displaying home pages on the WWW and displaying the locations of their owners on the <u>map</u>. Therefore, the problem comes up that information is not provided to users in a format suitable for a function such as route guidance.

# Brief Summary Text (17):

A first aspect of the present invention is directed to an information terminal device structured to be mobile and having access to a plurality of information service centers on a network which is using a predetermined protocol for communications, wherein, each of the information service centers is structured as being capable of transmitting information in a tag format indicating attributes and contents of the information in accordance with the communications protocol, the device comprising a first receiver receiving route information indicating a route from a start point to a destination and guidance information for guiding the route, a route quidance part quiding the route from the start point to the destination by using first cartographic data having a basis on the route information and/or the quidance information received by the first receiver, and a second receiver receiving, from each of the information service centers, point information in the tag format indicating details of each important point on the route guided by the route guidance part, as required, wherein, the route guidance part presents the point information received by the second receiver simultaneously with a map based on the first cartographic data to clarify each important point on the route.

#### Brief Summary Text (26):

According to a fifth aspect, in the first aspect, the point information includes second cartographic data having a scale different from that of the first cartographic data, and the route guidance part presents a <u>map</u> based on the second cartographic data received by the second receiver simultaneously with the <u>map</u> based on the first cartographic data.

#### Brief Summary Text (27):

According to a sixth aspect, in the fifth aspect, the second cartographic data is cartographic data for showing an enlarged <u>map</u> of a vicinity of the important point.

#### Brief Summary Text (29):

According to an eighth aspect, in the first aspect, the point information is the second cartographic data for showing details in a building or an underground mall as being the important point, and the route guidance part presents a <u>map</u> based on the second cartographic data received by the second receiver simultaneously with the map based on the first cartographic data.

#### Brief Summary Text (30):

According to a ninth aspect, in the fifth aspect, when the second receiver receives a plurality of second cartographic data, the route guidance part presents the  $\underline{\text{map}}$  based on the second cartographic data of the largest data size simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data.

# Brief Summary Text (31):

According to a tenth aspect, in the fifth aspect, when the second receiver receives a plurality of second cartographic data, the route guidance part presents the  $\underline{\text{map}}$  based on the second cartographic data of the smallest data size simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data.

# Brief Summary Text (32):

According to an eleventh aspect, in the fifth aspect, when the second receiver receives a plurality of second cartographic data, the route guidance part presents the  $\underline{\text{map}}$  based on the latest second cartographic data simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data.

#### Brief Summary Text (33):

As described in the fifth to the eleventh aspects, the route guidance part simultaneously displays the <u>map</u> based on the second cartographic data with the <u>map</u> based on the first cartographic data in accordance with the priorities respectively described in the aspects. In this manner, user-friendly route guidance further reflecting the user's preferences can be presented.

# Brief Summary Text (48):

A twentieth aspect of the present invention is directed to a method for route quidance used for an information terminal device structured to be mobile and having access to a plurality of information service centers on a network which is using, or uses, a predetermined protocol for communications, wherein, each of the information service centers is structured as being capable of transmitting information in a tag format indicating attributes and contents of the information in accordance with the communications protocol, the method comprising the steps of receiving route information indicating a route from a start point to a destination and guidance information for guiding the route, guiding the route from the start point to the destination by using cartographic data having a basis on the route information and/or the guidance information received in the receiving step by using cartographic data, and receiving, from each of the information service centers, point information in the tag format indicating details of each important point on the route quided in the guiding step, as required, wherein, in the guiding step, the point information received in the point information receiving step is presented simultaneously with a map based on the cartographic data to clarify each important point on the route.

#### Drawing Description Text (15):

FIG. 14 is a  $\underline{\text{MAP}}$ -type definition that is handled by the information terminal device 100 and the information service center 310, and the like according to each embodiment.

# Detailed Description Text (5):

The information terminal device 100 is structured to be carried in a motor <u>vehicle</u> or carried by a user for mobility. The ISP 200 provides a service for accessing to the Internet 400 for subscribers. Typical services of the ISP 200 are to send and receive e-mails and to browse home pages. A business operator of ISP 200 sets up an access point 210 at a predetermined location and manages the access point 210.

# Detailed Description Text (11):

The input part 101 detects a user operation and notifies the processor 104 of the detected user operation. The locator 102 detects a present location of the mobile information terminal device 100 and notifies the processor 104 of the detected location. The present location can be detected by using the GPS (Global Positioning System), an autonomous <u>navigation</u>, a PHS, a cellular phone, and a combination among GPS and any other possible method. The storage 103 stores data required for route guidance such as cartographic data, and further stores the POI information, as required.

# Detailed Description Text (43):

First, in step S305, the search results having the same [POI-ID] are selected for processing- Next, the processor 104 assigns priorities to the selected search results (step S305). The following three methods are presumable for assigning priorities in the embodiment. A first method is that the processor 104 searches each <size> of the selected search results and gives higher priority to the search result having larger data size. In this case, the detail of information is prioritized. A second method is that the processor 104 also searches <size> and gives higher priority to the search result having smaller data size. In this case, the reduction in communication costs and a time required for retrieving POI information is prioritized. A third method is that the processor 104 searches each

<update> of the search results and gives higher priority to the one having the
later date of update- In this case, <u>freshness of information</u> is prioritized. Any of
the above three methods is previously set in the information terminal device 100 to
meet the user's preference.

# Detailed Description Text (51):

Note that the route from the present location to the destination also can be calculated in the information terminal device 100 as is done in general car <a href="mavigation">navigation</a> systems. If the calculation is made in the information service center 330 as in the embodiment, however, a computer having higher computing facility can be used and cartographic data used for calculation can be wholly stored in main memory of the computer, enabling route calculation at high speed.

# Detailed Description Text (65):

The second branch point is the N-th crossing on the traffic regulation <u>map</u>, in which each crossing is assumed to be numbered uniquely on the nationwide scale. Other tags described in the following lines are similar to that described for the Miyakezaka crossing, and therefore the description thereof is omitted.

# Detailed Description Text (70):

On the other hand, if determined Yes in step S503, that is, if the information terminal device 100 is close enough to the next branch point, the processor 104 executes processing in step S504. Processing in steps S504 to S507 is described in detail by taking the second branch point shown in FIG. 10(b) as the example. First, the information terminal device 100 presents the description of the guidance information to the user (step S504). The user is thus notified that he/she is now close to the crossing specified by the N-th crossing on the traffic regulation map. According to the guidance information in FIG. 10(b), the information terminal device 100 is required to enter Toranomon crossing (specified by the crossing number N) from Sakurada street, pass the crossing, and exit therefrom to Sotobori street. The landmark (POI) of the approaching crossing is presented by only its name, i.e. Z store, and its phone number.

# <u>Detailed Description Text</u> (71):

The processor 104 uses the name and the phone number as keywords, and transmits the keywords to the information service center 350 or 360 through the information request part 109 to request a search for the POI based on the keywords (step S505). To be specific, the processor 104 transmits, as control data, such search request that is shown in FIG. 12(a) including the phone number as the keyword to the information service center 350 or 360 providing the detailed POI information. Upon receiving the search request, the information service center 350 or 360 performs a keyword search. As the search processing performed by the information service center 350 or 360 is a simple database search, description is omitted herein. When finding the detailed POI information matching with the keyword in the database, the information service center 350 or 360 transmits the detailed POI information of the type shown in FIG. 7(d) as the search result to the information terminal device 100.

# Detailed Description Text (75):

As such, in the present embodiment, the detailed POI information is described by using the tags. Particularly, the location of the POI can be easily specified by combining the <longitude> tags and the <latitude> tags, or simply by the <address> tags. Accordingly, the POI information becomes related more closely to the cartographic data, thereby enabling the processor 104 to easily superimpose the detailed POI data such as an image on the map displayed based on the cartographic data. In this manner, the image of the landmark at the branch point is simultaneously presented with the map. For example, as shown in FIG. 13, the picture of the POI (e.g. Z store) is presented in the proximity of the branch point so that the user can easily find the branch point.

# Detailed Description Text (76):

It is also effective to present a  $\underline{\text{map}}$  locally showing the detail for easier recognition of the branch point. In this case, the information terminal device 100 receives cartographic data from the information service center 340 in a  $\underline{\text{MAP}}$ -type description shown in FIG. 14. In [ID] of the  $\underline{\text{MAP}}$ -type information, similarly to the other IDs , a name, a data size and a date of update for specifying cartographic data are described.

#### Detailed Description Text (77):

The  $\underline{map}$  presented on the information terminal device 100 has two types, i.e., a bit- $\underline{map}$  data for presenting a  $\underline{map}$  as an image and a vector  $\underline{map}$  that represents roads as vectors. Between <type> and </type> tags, either one of the types is inserted to specify the type of the cartographic data that is specified by the [ID].

# Detailed Description Text (79):

Between <maker> and </maker> tags and between <format> and </format> tags, a creator of cartographic data and a format type thereof are inserted, respectively. These items are included in the  $\underline{\mathsf{MAP}}$ -type information to secure adaptability to a software handling the cartographic data.

# Detailed Description Text (80):

Between <dispsize> and </dispsize> tags, a size of a <u>map</u> is inserted to specify the size of the <u>map</u> to be displayed on the information presentation part 108.

# <u>Detailed Description Text</u> (81):

Herein, [POS] is used for describing the coordinates of the top-left corner and the bottom-right corner of the  $\underline{map}$  to be displayed on a display (exemplary implementation of the information presentation part 108). The boundaries of the  $\underline{map}$  to be displayed on the display are thus specified. Further, from the specified boundaries, the scale of the  $\underline{map}$  can be automatically determined. For example, if the area within the boundaries is one square kilometer, a scale to show less reduced  $\underline{map}$  is selected and if the area is within a hundred square kilometer, a scale to show more reduced  $\underline{map}$  is selected.

# Detailed Description Text (87):

In a case of selecting the largest size data, the processor 104 is giving the priority to the detail of information. In a case of selecting the smallest size data, the processor 104 is giving the priority to the reduction of the processing load of the information terminal device 100. Specifically, depending on the data formats, the plurality of received cartographic data may differ in size from each other even if the areas specified therein are the same. In such case, the selection of the smallest size data fits the purpose of reducing the processing load of the information terminal device 100. Further, in a case of selecting the data having the latest date of update, the processor 104 is giving priority to the freshness of the data.

# Detailed Description Text (88):

In the above described manner, the information terminal device 100 receives the cartographic data for locally showing the detail from the information service center 340. The information terminal device 100 therefore is capable of displaying guidance screens shown in FIG. 15. On the left halves of display screens (a) and (b) shown in FIG. 15, detailed <a href="maps">maps</a> (overhead views) generated from the cartographic data for the vicinity of the branch point crossing, which is received from the information service center 340, are displayed, and are pointed by 2 arrows, respectively. Cartographic data for a <a href="map">map</a> displayed on each of the right-half screens, pointed by 1 arrows, is usually stored in the storage 103, but is assumed to be originally transmitted from the information service center 330 and stored in the storage 103 as an update. The <a href="map">map</a> displayed on each of the right-half screens is the vector <a href="map">map</a> and can be utilized, as is the case with general car

<u>navigation</u> systems, for <u>map</u> display, location detection, route search, and route guidance. The cartographic data for the vector <u>map</u> is small in data size since it is for generating the vector <u>map</u> that is not in detail. Therefore, the storage 103 in the information terminal device 100 is sufficient for storing such small data.

# Detailed Description Text (89):

On the other hand, the <u>maps</u> on the left halves of the screens (a) and (b) are both the bit<u>-map</u> data, which show a quite detailed information. The cartographic data for the <u>map</u> therefore is large in data size and also required to be updated very often to reflect detailed changes. Accordingly, it is not preferable to store such huge data requiring frequent reconfiguration in the information terminal device 100. Instead, whenever required, the information terminal device 100 can receive detailed information on any branch point that is difficult to find for the user, by communicating with the information service center 340, as described above. Consequently, the information terminal device 100 is no longer required to store the detailed data in itself and further, becomes capable of always utilizing the latest information. The method of utilizing the detailed information in such a manner is applicable not only to the branch points but also to the present locations and the vicinities of destinations.

# Detailed Description Text (93):

As guiding the route by using the maps, the information terminal device 100 travels toward the destination. If determining to have reached the vicinity of the destination in step S502, the information terminal device 100 presents guidance information indicating so (step S508). Thereafter, destination information is outputted. In the embodiment, it is assumed that the user moves to the vicinity of the destination by car, and then reaches the destination on foot. More specifically, it is assumed that the user gets off the car at the parking in the vicinity of the destination, and then walks to the destination, that is, the X trading company. In such case, the processor 104 requests the information service center 360 to transmit a floor map showing tenants in the building as the destination information (detailed POI information) (step S509). As a result, the processor 104 receives the positional information regarding the X trading company in a form of image data (step S510), and can present the location of the destination in the building to the user as shown in FIG. 16 (step S511). The user thus can reach the destination easily. Note not only the image data for showing inside the building but also cartographic data for underground malls, for example, may serve as the destination information for realizing user-friendly route guidance.

# CLAIMS:

1. An information terminal device structured to be mobile and having access to a plurality of information service centers on a network that uses a predetermined protocol for communications, wherein

each of the information service centers is structured as being capable of transmitting information in a tag format indicating attributes and contents of the information in accordance with the communications protocol, said information terminal device comprising:

- a first receiving part operable to receive route information indicating a route from a start point to a destination and guidance information for guiding the route;
- a route guidance part operable to guide the route from the start point to the destination by using first cartographic data having a basis on the route information and/or the guidance information received by said first receiving part; and

a second receiving part operable to receive, from each of the information service centers, point information in the tag format indicating details of each important point on the route guided by said route guidance part based on a distance to each of the important points wherein

said route guidance part, in guiding the route, is operable to present the point information received by said second receiver simultaneously with a map based on the first cartographic data.

5. The information terminal device as claimed in claim 1, wherein

the point information includes second cartographic data having a scale different from that of the first cartographic data, and

said route guidance part is operable to present a <u>map</u> based on the second cartographic data received by said second receiving part simultaneously with the map based on the first cartographic data.

6. The information terminal device as claimed in claim 5, wherein

the second cartographic data is cartographic data for showing an enlarged <u>map</u> of a vicinity of the important point.

8. The information terminal device as claimed in claim 5, wherein

said route guidance part is operable to present a  $\underline{\text{map}}$  based on second cartographic data that has a largest data size simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data when said second receiving part receives a plurality of second cartographic data.

9. The information terminal device as claimed in claim 5, wherein

said route guidance part is operable to present a  $\underline{\text{map}}$  based on second cartographic data that has a smallest data size simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data when said second receiving part receives a plurality of second cartographic data.

10. The information terminal device as claimed in claim 5, wherein

said route guidance part is operable to present a  $\underline{\text{map}}$  based on a latest second cartographic data simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data when said second receiving part receives a plurality of second cartographic data.

11. The information terminal device as claimed in claim 1, wherein

the point information is second cartographic data for showing details in a building or an underground mall as being the important point, and

said route guidance part is operable to present a  $\underline{\text{map}}$  based on the second cartographic data received by said second receiving part simultaneously with the  $\underline{\text{map}}$  based on the first cartographic data.

20. A method for route guidance used for an information terminal device structured to be mobile and having access to a plurality of information service centers on a network that uses a predetermined protocol for communications, wherein

each of the information service centers is structured as being capable of transmitting information in a tag format indicating attributes and contents of the information in accordance with the communications protocol, said method comprising:

receiving route information indicating a route from a start point to a destination and guidance information for guiding the route;

guiding the route from the start point to the destination by using cartographic data having a basis on the received route information and/or the received guidance information; and

receiving, from each of the information service centers, point information in the tag format indicating details of each important point on the guided route based on a distance to each of the important points, wherein

in said guiding, the received point information is presented simultaneously with a map based on the cartographic data.

Previous Doc Next Doc Go to Doc#

# **Hit List**

First Hit Clear Generate Collection Print Fwd Refs Bkwd Refs

Generate: OACS

# Search Results - Record(s) 1 through 10 of 21 returned.

☐ 1. Document ID: US 20050091118 A1

Using default format because multiple data bases are involved.

L3: Entry 1 of 21

File: PGPB

Apr 28, 2005

PGPUB-DOCUMENT-NUMBER: 20050091118

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050091118 A1

TITLE: Location-Based filtering for a shopping agent in the physical world

PUBLICATION-DATE: April 28, 2005

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Fano, Andrew Ernest

Evanston

IL

US

US-CL-CURRENT: 705/26

Full Title Citation	Front Beview Classification	trate Reference Sequences	Attachments   Claims   19000   Eraw De

☐ 2. Document ID: US 20030191568 A1

L3: Entry 2 of 21

File: PGPB

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030191568

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030191568 A1

TITLE: Method and system for controlling a vehicle

PUBLICATION-DATE: October 9, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Breed, David S.

Boonton Township

NJ

US

US-CL-CURRENT: 701/36; 340/438, 701/213

Full Title Citation Front Review Classification trate Reference Sequences Attachments Claims 10000 travolo-

☐ 3. Document ID: US 20030154211 A1

L3: Entry 3 of 21

File: PGPB

Aug 14, 2003

PGPUB-DOCUMENT-NUMBER: 20030154211

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030154211 A1

TITLE: Methods of gathering and delivering information, terminal unit and server

for information processing, and computer product

PUBLICATION-DATE: August 14, 2003

INVENTOR-INFORMATION:

NAME CITY STATE

Kasahara, Tomomi Kawasaki JP

US-CL-CURRENT: 707/102

Full	Titl∈	Ostation	Front	Flewiew	Classification	(-ate	Reference	Sequences	#ittachments	Claims	[[00]]	Errawe Er-
						*********	***************************************	***************************************		- Charles and Report Control Control		
	_											

☐ 4. Document ID: US 20030149981 A1

L3: Entry 4 of 21

File: PGPB

Aug 7, 2003

Mar 27, 2003

COUNTRY

PGPUB-DOCUMENT-NUMBER: 20030149981

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030149981 A1

TITLE: System and method for generating customized EPG data and EPG application

programs

PUBLICATION-DATE: August 7, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Finster, Paul New York NY US
Ruderman, David Brooklyn NY US
Ribero, Patrice Nice FR

US-CL-CURRENT: 725/46; 725/47

Full	Titl-	e Citation Front	Fleniem	Classification	[rate	Reference	Sequences	Attachments	Claime	[[m](])	Errain Er-
	5.	Document ID:	US 200	030061333	A1						

File: PGPB

PGPUB-DOCUMENT-NUMBER: 20030061333

PGPUB-FILING-TYPE: new

L3: Entry 5 of 21

DOCUMENT-IDENTIFIER: US 20030061333 A1

TITLE: System and method for universal networked device management

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Dean, Stephen	Snohomish	WA	US
Millican, Art	Granite Falls	WA	US
Fletcher, Jonathan David	Everett	WA	US
Stewart, Kirk David	Everett	WA	US
Kirchmeier, Cheri	Woodinville	WA	US
Jarchow, Jaye	Snohomish	WA	US
Phan, Nguyet	Lynnwood	WA	US
Putnam, Joe	Cedar Rapids	IA	US
Carter, Anthony	Lynnwood	WA	US

US-CL-CURRENT: 709/223; 709/203

Full Title Citation Front Fleview Classification Cate	Referen	se Sequence:	Attachmenta	Claime	Pauli	(Frame (Fr
☐ 6. Document ID: US 20030009430 A1			·		***************************************	
L3: Entry 6 of 21	File:	PGPB		Jan	9,	2003

PGPUB-DOCUMENT-NUMBER: 20030009430

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030009430 A1

TITLE: SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR ADVANCED INFORMATION GATHERING

FOR TARGETTED ACTIVITIES

PUBLICATION-DATE: January 9, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

ATHERTON MOUNTAIN VIEW BURKEY, CHAD CA US CA HO, DENISE US

US-CL-CURRENT: 707/1

Full Title Citation Front Review Clas	anication Date Reference Sequences 3	Attachmente Claims 1990 Graw De
***************************************		
☐ 7. Document ID: US 20020	198632 A1	
L3: Entry 7 of 21	File: PGPB	Dec 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020198632

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020198632 A1

TITLE: Method and arrangement for communicating between vehicles

PUBLICATION-DATE: December 26, 2002

INVENTOR-INFORMATION:

STATE COUNTRY NAME CITY Breed, David S. Boonton Township NJ US DuVall, Wilbur E. Kimberling City MO US CA US ' Johnson, Wendell C. Signal Hill UΑ Lukin, Kostyantyn Alexandrovich Kharkov Konovalov, Vladymyr Michailovich Kharkov UΑ

US-CL-CURRENT: 701/1; 701/213

Full Title Citation Front Review Classification Date	Reference Sequences	Attachmento Claims 10000 Braw Co
	**************************************	
□ 8. Document ID: US 20020184111 A1		
L3: Entry 8 of 21	File: PGPB	Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020184111

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020184111 A1

TITLE: Intelligent multimedia e-catalog

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Swanson, Leslie H.

Camnbridge

MA

US

US-CL-CURRENT: 705/26

Remem   Classification   Date	Reference Sequences	Attachments Claims	19000 Extans (c)
US 20020063725 A1			
F	ile: PGPB	May	30, 2002
	US 20020063725 A1		

PGPUB-DOCUMENT-NUMBER: 20020063725

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020063725 A1

TITLE: Method and apparatus for capturing and presenting panoramic images for websites

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Tarbutton, William L. Preston MD
Dupont, Eva J. Seaford DE

Tarbutton, Lisa I. Preston MD US

US-CL-CURRENT: 345/629

Full Title Citation Front Beview Classification Date	Reference   Sequences   Attachments	Claims 19000 Erao. E-
☐ 10. Document ID: US 20020035501 A1		
L3: Entry 10 of 21	File: PGPB	Mar 21, 2002
Lo. Lucry to or 21	LIIC. LOLD	1.ul 21, 2002

US

US

PGPUB-DOCUMENT-NUMBER: 20020035501

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020035501 A1

TITLE: A PERSONALIZED PRODUCT REPORT

PUBLICATION-DATE: March 21, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

HANDEL, SEAN SAN FRANCISCO CA US
DAY, BRIAN BURLINGAME CA US
YUEN, MIYA FOSTER CITY CA US

US-CL-CURRENT: 705/10

Full Title Odation Front Rev	iem   Classification   Date   Refe	rence Sequence: Attachme	ento Olaimo 1900 Draw D-
***************************************			
Clear Generate Collection	on Print Fwd F	Refs Bkwd Refs	Generate OACS
Terms		Documents	
L2 and database	•	·	21

Display Format: - Change Format

Previous Page Next Page Go to Doc#

# **Hit List**

First Hit Clear Generate Collection Print Fwd Refs Bkwd Refs

Generate OACS

**Search Results -** Record(s) 11 through 20 of 21 returned.

☐ 11. Document ID: US 6892196 B1

Using default format because multiple data bases are involved.

L3: Entry 11 of 21

File: USPT

May 10, 2005

US-PAT-NO: 6892196

DOCUMENT-IDENTIFIER: US 6892196 B1

TITLE: System, method and article of manufacture for a user programmable diary

interface link

DATE-ISSUED: May 10, 2005

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Hughes; Lucian P.

Montara

CA

US-CL-CURRENT: 707/4; 707/3

Full Title Citation Front Review Classification Date Reference Fig. 12. Document ID: US 6845370 B2

L3: Entry 12 of 21 File: USPT Jan 18, 2005

US-PAT-NO: 6845370

DOCUMENT-IDENTIFIER: US 6845370 B2

TITLE: Advanced information gathering for targeted activities

Full Title Otation Front Review Classification Date Reference Fig. 1997 - Claims Kimic Draw D.

☐ 13. Document ID: US 6768944 B2

L3: Entry 13 of 21

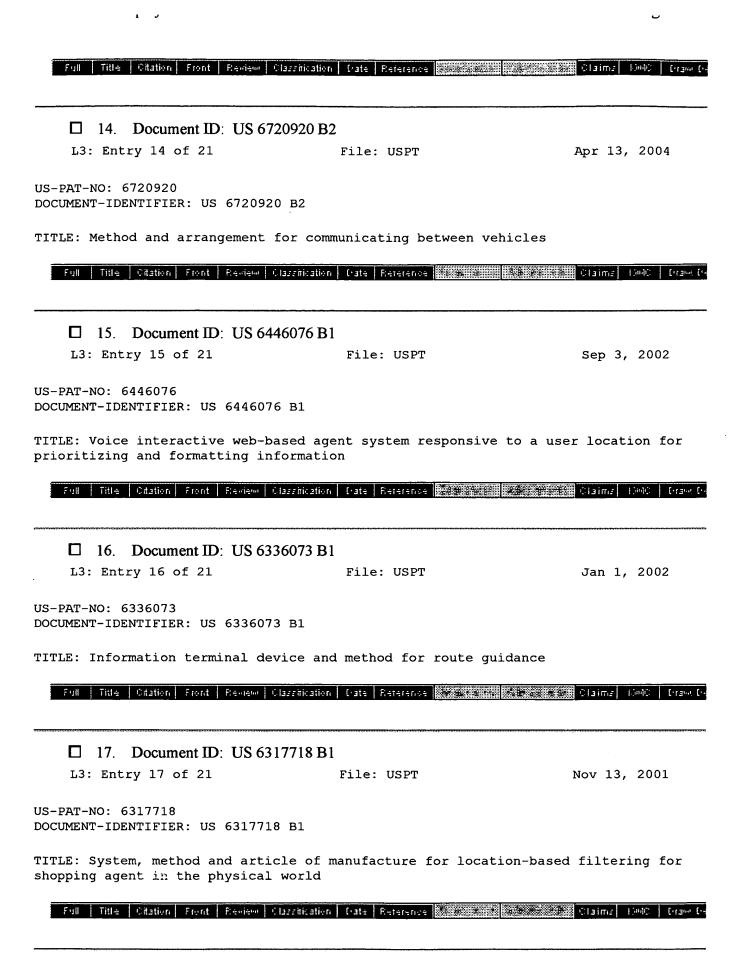
File: USPT

Jul 27, 2004

US-PAT-NO: 6768944

DOCUMENT-IDENTIFIER: US 6768944 B2

TITLE: Method and system for controlling a vehicle



☐ 18. Document ID: US 6202062 B1

L3: Entry 18 of 21

File: USPT

Mar 13, 2001

Oct 17, 2000

US-PAT-NO: 6202062

DOCUMENT-IDENTIFIER: US 6202062 B1

TITLE: System, method and article of manufacture for creating a filtered information summary based on multiple profiles of each single user

Full Title Citation Front Review Classification Cate Reference Company Company

US-PAT-NO: 6195651

DOCUMENT-IDENTIFIER: US 6195651 B1

TITLE: System, method and article of manufacture for a tuned user application

experience

Full Title Citation Front Review Classification Etate Reference Exercise Claims Collins Collin

File: USPT

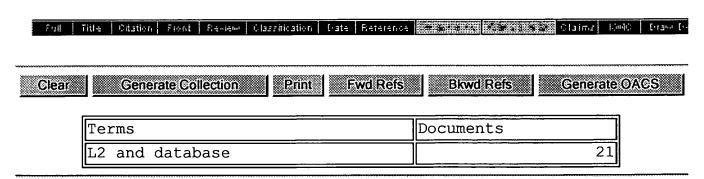
US-PAT-NO: 6134548

DOCUMENT-IDENTIFIER: US 6134548 A

L3: Entry 20 of 21

\*\* See image for Certificate of Correction \*\*

TITLE: System, method and article of manufacture for advanced mobile bargain shopping



Display Format: - Change Format

Previous Page Next Page Go to Doc#

# **Hit List**

First Hit Clear Generate Collection Fwd Refs **Bkwd Refs** Print Generate OACS **Search Results -** Record(s) 21 through 21 of 21 returned. ☐ 21. Document ID: JP 2004085286 A Using default format because multiple data bases are involved. L3: Entry 21 of 21 Mar 18, 2004 File: JPAB PUB-NO: JP02004085286A DOCUMENT-IDENTIFIER: JP 2004085286 A TITLE: ON-VEHICLE NAVIGATION DEVICE, NAVIGATION INFORMATION DISPLAY METHOD AND **PROGRAM** PUBN-DATE: March 18, 2004 INVENTOR-INFORMATION: COUNTRY NAME SUZUKI, KEIZO INT-CL (IPC):  $\underline{G01}$   $\underline{C}$   $\underline{21/00}$ ;  $\underline{G06}$   $\underline{F}$   $\underline{3/00}$ ;  $\underline{G08}$   $\underline{G}$   $\underline{1/137}$ ;  $\underline{G09}$   $\underline{B}$   $\underline{29/00}$ Full Title Citation Front Review Classification Date Reference Generate OACS Clear Generate Collection Print Fwd Refs Bkwd Refs Terms Documents L2 and database 21 Change Format **Display Format:** 

Next Page

Go to Doc#

Previous Page

First Hit

Previous Doc

Next Doc

Go to Doc#

**End of Result Set** 

Generate Collection Print

L3: Entry 21 of 21

File: JPAB

Mar 18, 2004

PUB-NO: JP02004085286A

DOCUMENT-IDENTIFIER: JP 2004085286 A

TITLE: ON-VEHICLE NAVIGATION DEVICE, NAVIGATION INFORMATION DISPLAY METHOD AND

PROGRAM

PUBN-DATE: March 18, 2004

INVENTOR-INFORMATION:

----

NAME COUNTRY

SUZUKI, KEIZO

ASSIGNEE-INFORMATION:

NAME COUNTRY

ALPINE ELECTRONICS INC

APPL-NO: JP2002244534

APPL-DATE: August 26, 2002

INT-CL (IPC): G01 C 21/00; G06 F 3/00; G08 G 1/137; G09 B 29/00

ABSTRACT:

PROBLEM TO BE SOLVED: To enable a user to know whether a displayed data item is the updated newest one or contains an old content, and to thereby perform driving guided by navigation without anxiety.

SOLUTION: In this on-vehicle <u>navigation</u> device for receiving differential data and updating a <u>database</u>, <u>freshness information</u> of data is displayed together with the displayed data item based on the differential data and a stored content of the <u>database</u> before updation. For example, the <u>freshness information</u> includes information for showing the degree of freshness of the displayed data item. The <u>freshness information</u> is information for showing whether the degree of freshness of the displayed data item is guaranteed or not, and may show a display corresponding to the freshness of the data item.

COPYRIGHT: (C) 2004, JPO

Previous Doc Next Doc Go to Doc#

First Hit

Previous Doc

Next Doc

Go to Doc#

Generate Collection

Print

L3: Entry 1 of 21

File: PGPB

Apr 28, 2005

DOCUMENT-IDENTIFIER: US 20050091118 A1

TITLE: Location-Based filtering for a shopping agent in the physical world

# Application Filing Date: 20011010

#### Summary of Invention Paragraph:

[0007] Location has, of course, played a significant role in other areas research. Navigation, most obviously, has relied on the ability to detect and monitor location. Recent work on supporting user mobility in which personalized computing environments follow users to remote locations also rely on knowledge of a user's location. In these cases, however, location is the problem. That is, a vehicle must be guided from one point to another, or a computing environment must be replicated at a remote location. The ParcTab based "location browser", which displays file directories and runs programs associated with particular rooms in an office, is somewhat similar in its use of location-awareness as a means of capturing the user's context.

# Detail Description Paragraph:

[0175] An Egocentric Interface is a user interface crafted to satisfy a particular user's needs, preferences and current context. It utilizes the user's personal information that is stored in a central profile <u>database</u> to customize the interface. The user can set security permissions on and preferences for interface elements and content. The content integrated into the Egocentric Interface is customized with related information about the user. When displaying content, the Egocentric Interface will include the relationship between that content and the user in a way that demonstrates how the content relates to the user. For instance, when displaying information about an upcoming ski trip the user has signed up for, the interface will include information about events from the user's personal calendar and contact list, such as other people who will be in the area during the ski trip. This serves to put the new piece of information into a context familiar to the individual user.

# Detail Description Paragraph:

[0176] FIG. 10A describes the Intention Value Network Architecture implementation for the World Wide Web. For simplification purposes, this diagram ignores the complexity pertaining to security, scalability and privacy. The customer can access the Intention Value Network with any Internet web browser 1010, such as Netscape Navigator or Microsoft Internet Explorer, running on a personal computer connected to the Internet or a Personal Digital Assistant with wireless capability. See FIG. 17 for a more detailed description of the multiple methods for accessing an Intention Value Network. The customer accesses the Intention Value Network through the unique name or IP address associated with the Integrator's Web Server 1020. The Integrator creates the Intention Value Network using a combination of resources, such as the Intention Database 1030, the Content Database 1040, the Supplier Profile Database 1050, and the Customer Profile Database 1060.

# Detail Description Paragraph:

[0177] The Intention <u>Database</u> 1030 stores all of the information about the structure of the intention and the types of products and services needed to fulfill

the intention. Information in this database includes intention steps, areas of interest, layout templates and personalization templates. The Content Database 1040 stores all of the information related to the intention, such as advice, referral information, personalized content, satisfaction ratings, product ratings and progress reports.

# Detail Description Paragraph:

[0178] The Supplier Profile Database 1050 contains information about the product and service providers integrated into the intention. The information contained in this database provides a link between the intention framework and the suppliers. It includes product lists, features and descriptions, and addresses of the suppliers' product web sites. The Customer Profile Database 1060 contains personal information about the customers, such as name, address, social security number and credit card information, personal preferences, behavioral information, history, and web site layout preferences. The Supplier's Web Server 1070 provides access to all of the supplier's databases necessary to provide information and transactional support to the customer.

# Detail Description Paragraph:

[0179] The Product Information Database 1080 stores all product-related information, such as features, availability and pricing. The Product Order Database 1090 stores all customer orders. The interface to this database may be through an Enterprise Resource Planning application offered by SAP, Baan, Oracle or others, or it may be accessible directly through the Supplier's Web Server or application server. The Customer Information Database 1091 stores all of the customer information that the supplier needs to complete a transaction or maintain customer records.

#### Detail Description Paragraph:

[0180] FIG. 10B is a flowchart providing the logic utilized to create a web page within the Egocentric Interface. The environment assumes a web server and a web browser connected through a TCP/IP network, such as over the public Internet or a private Intranet. Possible web servers could include Microsoft Internet Information Server, Netscape Enterprise Server or Apache. Possible web browsers include Microsoft Internet Explorer or Netscape Navigator. The client (i.e. web browser) makes a request 1001 to the server (i.e. web server) for a particular web page. This is usually accomplished by a user clicking on a button or a link within a web page. The web server gets the layout and content preferences 1002 for that particular user, with the request to the database keyed off of a unique user id stored in the client (i.e. web browser) and the User profile database 1003. The web server then retrieves the content 1004 for the page that has been requested from the content database 1005. The relevant user-centric content, such as calendar, email, contact list, and task list items are then retrieved 1006. (See FIG. 11 for a more detailed description of this process.) The query to the database utilizes the user content preferences stored as part of the user profile in the User profile database 1003 to filter the content that is returned. The content that is returned is then formatted into a web page 1007 according to the layout preferences defined in the user profile. The web page is then returned to the client and displayed to the user 1008.

# Detail Description Paragraph:

[0181] FIG. 11 describes the process of retrieving user-centric content to add to a web page. This process describes 1006 in FIG. 10B in a more detailed fashion. It assumes that the server already has obtained the user profile and the existing content that is going to be integrated into this page. The server parses 1110 the filtered content, looking for instances of events, contact names and email addresses. If any of these are found, they are tagged and stored in a temporary holding space. Then, the server tries to find any user-centric content 1120 stored in various databases. This involves matching the tagged items in the temporary storage space with calendar items 1130 in the Calendar Database 1140; email items

1115 in the Email <u>Database</u> 1114; contact items 1117 in the Contact <u>Database</u> 1168; task list items 1119 in the Task List <u>Database</u> 1118; and news items 1121 in the News <u>Database</u> 1120. After retrieving any relevant user-centric content, it is compiled together and returned 1122.

# Detail Description Paragraph:

[0184] FIG. 12 describes the relationship between a user, his multiple personas and his multiple profiles. At the User Level is the User Profile 1200. This profile describes the user and his account information. There is one unique record in the database for each user who has an account. Attached to each user are multiple Personas 1220, 1230 & 1240. These Personas are used to group multiple Profiles into useful contexts. For instance, consider a user who lives in San Francisco and works in Palo Alto, but has a mountain cabin in Lake Tahoe. He has three different contexts in which he might be accessing his site. One context is work-related. The other two are home-life related, but in different locations. The user can create a Persona for Work 1220, a Persona for Home 1230, and a Persona for his cabin home 1240. Each Persona references a different General Profile. 1250, 1260 and 1270 which contains the address for that location. Hence, there are three General Profiles. Each Persona also references one of two Travel Profiles. The user maintains a Work Travel Profile 1280 that contains all of the business rules related to booking tickets and making reservations. This Profile may specify, for instance, that this person only travels in Business or First Class and his preferred airline is United Airlines. The Work Persona references this Work Travel Profile. The user may also maintain a Home Travel Profile 1290 that specifies that he prefers to travel in coach and wants to find non-refundable fairs, since they are generally cheaper. Both the Persona for Home and the Persona for the cabin home point to the Home Travel Profile.

#### Detail Description Paragraph:

[0192] FIG. 15 describes the process for generating the page that displays the agent's current statistics. When the user requests the agent statistics page 1510 with the client browser, the server retrieves the users' statistics 1520 from the users' profile database 1530. The server then performs the mathematical calculations necessary to create a normalized set of statistics 1540. The server then retrieves the formulas 1550 from the content database 1560 that will be used to calculate the user-centric statistics. Graphs are then generated 1570 using the generic formulas and that user's statistics. These graphs are inserted into a template to create the statistics page 1580. This page is then returned to the user 1590.

# Detail Description Paragraph:

[0195] FIG. 16 describes the algorithm for determining the personalized product ratings for a user. When the user requests a product report 1610 for product X, the algorithm retrieves the profiles 1620 from the profile database 1630 (which includes product ratings) of those users who have previously rated that product. Then the system retrieves the default thresholds 1640 for the profile matching algorithm from the content database 1650. It then maps all of the short list of users along several dimensions specified in the profile matching algorithm 1660. The top n (specified previously as a threshold variable) nearest neighbors are then determined and a test is performed to decide if they are within distance y (also specified previously as a threshold variable) of the user's profile in the set 1670 using the results from the profile matching algorithm. If they are not within the threshold, then the threshold variables are relaxed 1680, and the test is run again. This processing is repeated until the test returns true. The product ratings from the smaller set of n nearest neighbors are then used to determine a number of product statistics 1690 along several dimensions. Those statistics are inserted into a product report template 1695 and returned to the user 1697 as a product report.

# Detail Description Paragraph:

[0198] FIG. 17 presents the detailed logic associated with the many different methods for accessing this centrally stored profile. The profile <u>database</u> 1710 is the central storage place for the users' profile information. The profile gateway server 1720 receives all requests for profile information, whether from the user himself or merchants trying to provide a service to the user. The profile gateway server is responsible for ensuring that information is only given out when the profile owner specifically grants penmission. Any device that can access the public Internet 1730 over TCP/IP (a standard network communications protocol) is able to request information from the profile <u>database</u> via intelligent HTTP requests. Consumers will be able to gain access to services from devices such as their televisions 1740, mobile phones, Smart Cards, gas meters, water meters, kitchen appliances, security systems, desktop computers, laptops, pocket organizers, PDAs, and their vehicles, among others. Likewise, merchants 1750 will be able to access those profiles (given permission from the consumer who owns each profile), and will be able to offer customized, personalized services to consumers because of this.

# Detail Description Paragraph:

[0199] One possible use of the ubiquitous profile is for a hotel chain. A consumer can carry a Smart Card that holds a digital certificate uniquely identifying him. This Smart Card's digital certificate has been issued by the system and it recorded his profile information into the profile database. The consumer brings this card into a hotel chain and checks in. The hotel employee swipes the Smart Card and the consumer enters his Pin number, unlocking the digital certificate. The certificate is sent to the profile gateway server (using a secure transmission protocol) and is authenticated. The hotel is then given access to a certain part of the consumer's profile that he has previously specified. The hotel can then retrieve all of the consumer's billing information as well as preferences for hotel room, etc. The hotel can also access the consumer's movie and dining preferences and offer customized menus for both of them. The hotel can offer to send an email to the consumer's spouse letting him/her know the person checked into the hotel and is safe. All transaction information can be uploaded to the consumer's profile after the hotel checks him in. This will allow partners of the hotel to utilize the information about the consumer that the hotel has gathered (again, given the consumer's permission).

# Detail Description Paragraph:

[0202] FIG. 18 discloses the detailed interaction between a consumer and the integrator involving one supplier. The user accesses a Web Browser 1810 and requests product and pricing information from the integrator. The request is sent from the user's browser to the integrator's Web/Application Server 1820. The user's preferences and personal information is obtained from an integrator's customer profile database 1830 and returned to the Web/Application server. The requested product information is extracted from the supplier's product database 1840 and customized for the particular customer. The Web/Application server updates the supplier's customer information database 1850 with the inquiry information about the customer. The product and pricing information is then formatted into a Web Page 1860 and returned to the customer's Web Browser.

#### Detail Description Paragraph:

[0205] FIG. 19 discloses the logic in accordance with a preferred embodiment processing by an agent to generate a verbal summary for the user. When the user requests the summary page 1900, the server gets the user's agent preferences 1920, such as agent type, rules and summary level from the user profile database 1930. The server gets the content 1940, such as emails, to do list items, news, and bills, from the content database 1950. The agent parses all of this content, using the rules stored in the profile database, and summarizes the content 1960. The content is formatted into a web page 1970 according to a template. The text for the agent's speech is generated 1980, using the content from the content database 1990 and speech templates stored in the database. This speech text is inserted into the web page 1995 and the page is returned to the user 1997.

# Detail Description Paragraph:

[0211] FIG. 21 illustrates a managing daily logistics display in accordance with a preferred embodiment. A user is greeted by an animated agent 2100 with a personalized message 2190. The user can select from various activities based on requirements, including travel 2110, household chores 2120, finances 2130 and marketplace activities 2140. Icons 2142 for routine tasks such as e-mail, calendaring and document preparation are also provided to facilitate rapid navigation from one activity to another. Direct links 2146 are also provided to allow transfer of news and other items of interest. Various profiles can be selected based on where the user is located. For example, work, home or vacation. The profiles can be added 2170 as a user requires a new profile for another location. Various items 2180 of personal information are collected from the user to support various endeavors. Moreover, permissions 2150 are set for items 2180 to assure information is timely and current.

# Detail Description Paragraph:

[0226] FIG. 25 is a block diagram of a back end server in accordance with a preferred embodiment. The back-end (2400 of FIG. 24) is a computer system that has the following software active: Intelligent Agents Coordinator (Munin) 2580, Information Prioritization Subsystem 2530, a set of continuously and periodically running information gathering and processing Intelligent Agents 2500, 2502 and 2504, User Profiles Database 2542 and supporting software, Information Channels Database 2542 and supporting software, communications software 2550, information transformation software 2560, and auxiliary software.

#### Detail Description Paragraph:

[0247] 6. Information Prioritization Subsystem decides what information is most relevant to the user based on their personal profile, <u>freshness of the information</u>, and the Intelligent Agent Coordinator's prior suggestions.

# Detail Description Paragraph:

[0277] The following code is written and executed in the Microsoft Active Server Pages environment in accordance with a preferred embodiment. It consists primarily of Microsoft Jscript with some <u>database</u> calls embedded in the code to query and store information in the <u>database</u>.

#### Detail Description Table CWU:

8 <%@ LANGUAGE = "JScript" %> <% Response.Buffer = true; Response.Expires = 0; %> <html> <head> <title>Create An Intention</title> </head> <body bgcolor="#FFE9D5" style="font-family: Arial" text="#000000"> <% //Define some variables upl = Server.CreateObject("So- ftArtisans.FileUp") intention name = upl.Form ("intention name") intention desc = upl.Form("intention desc") //intention\_name = Request.Form("intention name") //intention desc = Request.Form ("intention desc") //intention icon = Request.Form("intention icon") submitted = upl.Form("submitted") items = new Enumerator(upl.Form) %> <% //Establish connection to the database objConnection = Server.CreateObject("ADODB.Connection") objConnection.Open("Maelst- rom") %> <% //Check to see if the person hit the button and do the appropriate thing if (submitted == "Add/Delete") { flag = "false" //loop through all the inputs while(!items.atEnd()) { i = items.item() //if items are checked then delete them if(upl.Form(\$\$) == "on") { objConnection.Execute("delete from user intention where intention id =" + i); bjConnection.Execute("delete from intentions where intention\_id =" + i); objConnection.Execute("delete from tools to intention where intention id =" + i) flag = "true" } items.moveNext ( ) } // if items were not deleted then insert whatever is in the text field in the database if(flag == "false") { intention name short = intention name.replace (/ /gi, "") objConnection. Execute ("INSERT INTO intentions (intention\_name, intention\_desc, intention\_icon) values(`" + intention\_name + "`, `" + intention desc + "', " + intention\_name\_short + ".gif" + "')") Response.write("the intention short name is " + intention\_name\_short); upl.SaveAs

("E:development/asp\_examples/"+ intention\_name\_short +".gif") } // Query the database to show the most recent items. rsCustomersList = objConnection.Execute ("SE- LECT \* FROM intentions") %> <input type="Submit" name="return to mcp" values="Go to Main Control Panel" onclick="location.href=`default.asp`"> <form method="post" action="intention\_create.asp" enctype="multipart/form-data" > <TABLE</pre> border=0> <font face="Arial" size="+1"><b>Enter in a new intention</b></font> <font face="Arial">Name:</font>- ; <INPUT TYPE="text" name="intention name"></td&- gt;</tr> <font face="Arial">Descrip- tion:</font><TEXTAREA name="intention desc"></TEXTAREA> <font face="Arial">Icon <INPUT type="submit" name="submitted" value="Add/Delete"> </TABLE> <HR> <font face="Arial" size="+1"><b>Current Intentions</b></font> <TABLE> <FONT color="white">Delete</FONT> <TD> <FONT colors="white">Itention</FONT> </TD> <TD> <FONT color="white">Description</FONT> </TD> <TD> <FONT color="white">Image</FONT> </TD> <% // Loop over the intentions in the list counter = 0; while (!rsCustomersList.EOF) { %> size: smaller"> <INPUT type="checkbox" name="<%=rsCustomersList ("intention id")%>"> </TD> <%= rsCustomersList("intention name")%> <%= rsCustomersList("intention\_desc")%> <img src="../images/<%=</pre> rsCustomersList("intention icon")%>"> <% counter++ rsCustomersList.MoveNext()} %> </TABLE> <hr> Available Tools </form> </BODY> </HTML>

#### Detail Description Table CWU:

9 <!-- #include file="include/check authentication.inc" --> <HTML> <HEAD> <TITLE>mySite! Intentions List</TITLE> <SCRIPT LANGUAGE="JavaScript"> function intentionsList ( ) { this.internalArray = new Array( ); <% // establish connection</pre> to the database objConnection = Server.CreateObject("ADODB.Connection"); objConnection.Open("Maelstrom"); // create query intentionsQuery = objConnection.Execute("SELECT \* FROM intentions ORDER BY intention\_name asc"); % > // write out the options <% numOptions = 0 while (!intentionsQuery.EOF) { intentionName = intentionsQuery("intention\_name"); intentionIcon = intentionsQuery("intention\_icon"); %> this.internalArray[<%= numOptions%>] = new Array(2); this.internalArray(<%= numOptions%>)[0] = "<%= intentionName %>"; this.internalArray[<%= numOptions%>][1] = "images/<%= intentionIcon %>"; <% numOptions++; intentionsQuery.moveNext(); %> <% } %> } numIntentions = <%= numOptions%>; intentionArray = new intentionsList().internalArray; function selectIntention ( ) { for (i=0;i<numIntentions;i++) { if</pre> (IntentionsListSelect.options[i].selected) { intentionNameTextField.value = intentionArray[i][0]; //intentionPicture.src = intentionArray[i][1]; break; } } } </SCRIPT> </HEAD> <BODY BGCOLOR="<%=Session("main background")%&- gt;" style="font-</pre> family: Arial"> <CENTER> <!--- <FORM NAME="intention list"> ---> <TABLE FRAME="BOX" border=0 CELLPADDING="2" CELLSPACING="2"> <TR><TD COLSPAN="3" STYLE="font: 20pt arial" ALIGN="CENTER"><B>Add a mySite! Intention</B></TD></TR> <TR><TD COLSPAN="3"> </TD></TR> <TR> <TD width="100"><font size="-1">Please Select An Intention You Would Like to Add to Your List</font></TD> <TD colspan=2> <SELECT ID="IntentionsListSelect" NAME="IntentionsListSelect" SIZE="10" style="font: 9pt Arial; " onClick="selectIntention( )"> <% intentionsQuery.moveFirst( ); for</pre> (j=0;j<numOptions;J++) { %> <OPTION VALUE="<%= intentionsQuery("intention\_id") %>" <% if (j == 0) { %> SELECTED <% } %>> <%= intentionsQuery("intention name") %> <% intentionsQuery.moveNext( ) } intentionsQuery.moveFirst( ); %> </SELECT> </TD> </TR> <TR><TD COLSPAN="3"> </TD></TR> <TR> <TD width="100"><font size="-1">Customize the Intention name</font></TD> <TD COLSPAN=2"><INPUT TYPE="text" NAME="intentionNameTextField" ID="intentionNameTextFie- ld" SIZE="30" VALUE="<%= <TR> <TD COLSPAN="3" ALIGN="CENTER"> <INPUT TYPE="button" NAME="intentionOKButton" VALUE=" OK " SIZE="10" ID="intentionOKButton" onClick="javaScript:top.opener.top.navframe- .addAnIntention();"> &nbsp; ; <INPUT TYPE="button" NAME="intentionCancelButton" VALUE="Cancel" SIZE="10" ID="intentionCancelButton" onClick="self.close();"> </TD> </TR> </TABLE> <!--- </FORM> ---> </CENTER> <% objConnection.Close(); %> </BODY> </HTML>

Previous Doc Next Doc Go to Doc#

# First Hit Fwd Refs

# Previous Doc

Next Doc

Go to Doc#

☐ Generate Collection

Print

L3: Entry 20 of 21

File: USPT

Oct 17, 2000

US-PAT-NO: 6134548

DOCUMENT-IDENTIFIER: US 6134548 A

\*\* See image for Certificate of Correction \*\*

TITLE: System, method and article of manufacture for advanced mobile bargain

shopping

DATE-ISSUED: October 17, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Gottsman; Edward

Evanston

 $_{
m IL}$ 

Brody; Adam

Chicago

IL

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

TYPE CODE

AC Properties B.V.

S'Gravenhage

NL

Clear

03

APPL-NO: 09/196339 [PALM]
DATE FILED: November 19, 1998

INT-CL-ISSUED: [07]  $\underline{G06}$   $\underline{F}$   $\underline{17/30}$ 

US-CL-ISSUED: 707/5; 707/3, 707/10, 705/26, 709/217, 709/249, 235/462, 235/472

US-CL-CURRENT: 707/5; 705/26, 707/10, 707/3, 709/217, 709/249

Search Selected

FIELD-OF-CLASSIFICATION-SEARCH: 707/3, 707/4, 707/10, 707/5, 707/7, 235/472,

235/462, 705/26, 709/249, 709/217

See application file for complete search history.

PRIOR-ART-DISCLOSED:

#### U.S. PATENT DOCUMENTS

Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5279882	January 1994	Daude et al.	428/192
5519608	May 1996	Kupiec	364/419.08
5606602	February 1997	Johnson et al.	379/115
5640193	June 1997	Wellner	348/7
5673322	September 1997	Pepe et al.	389/49

5721421	February 1998	VanDonkelaar	235/462
5732074	March 1998	Spaur et al.	370/313
<u>5854624</u>	December 1998	Grant	345/169
5913210	June 1999	Call	707/4
5938727	August 1999	Ikeda	709/218
<u>5950173</u>	September 1999	Perkowski	705/26
5971277	October 1999	Cragun et al.	235/462.01
5978773	November 1999	Hudetz et al.	705/23
<u>5979757</u>	November 1999	Tracy et al.	235/383
5992752	November 1999	Wilz, Sr. et al.	235/472.01

#### FOREIGN PATENT DOCUMENTS

	•	
FOREIGN-PAT-NO	PUBN-DATE	COUNTRY CLASS
0 651 531A2	May 1995	EP
0 856 812 A2	August 1998	EP
0883313 A2	December 1998	EP
0890907 A1	January 1999	EP
10177613	June 1998	JP
10171758	June 1998	JP
WO 97/17815	May 1997	WO
WO/97/40451	October 1997	WO .
WO 97/45814	December 1997	WO
WO 98/03923	January 1998	WO
WO 98/06055	February 1998	WO
WO 98/11744	March 1998	WO
WO 98/12833	March 1998	WO
WO 98/10541	March 1998	WO
WO 98/24050	June 1998	WO
WO 98/24036	June 1998	WO
WO 98/39909	September 1998	WO
WO 98/40823	September 1998	WO
WO 98/49813	November 1998	WO
WO 98/52371	November 1998	WO
WO 98/58476	December 1998	WO
WO 98/57474	December 1998	WO
WO 99/01969	January 1999	WO

# OTHER PUBLICATIONS

Chu-Sing Yang, Kun-da Wu, Chun-Wei Tseng; Support an Efficient Connection for Mobile IP; Proceedings, Ninth International Workshop on <u>Database</u> and Expert Systems Applications; Aug. 1998, IEE, Computer Society, pp. 514-519.

Mary Carmen Cupito; Emerging technologies: Has Their time come? Enterprise Integration; Health Management Technology; Dec. 1998, pp. 12-16.

Toh Han Shih; Online life-line; Wired for Business; Singapore Business Times; Dec. 1998, p. 1.

Chris Bradley; Remote and Mobile Computing Wigh TCP/IP; Enterprise Systems Journal; Jan. 1998, pp. 38-48.

Enhanced Services: Telecom customers will soon have one-stop, easy-to-use access to their services portfolio form anywhere, at any time, and in any way; Edge, on & about AT&T; May 1997, pp. 1-2, Anonymous.

Bob Emmerson; The Mobile Intranet: The next generation of GSM services will offer faster data rates and smarter messaging; May 1998; Byte Magazine, pp. 1-7. Timo Alanko, Markku Kojo, Mika Liljeberg; Mobile access to the Internet; a mediator-based solution; Internet Research; Electronis Networking Applications and Policy vol. 9, No. 1, pp. 58-65, 1999.

Andrezej Duda, Stephane Perret; A Network Programming Model for Mobile Applications and Information Access; Proceedings JENC7, pp. 141.1-141.9, No Date.

Nokia, Ericsson, Unwired Planet and Motorola unite to create an open common protocol for interactive wireless applications; Jun. 26, 1997, pp. 1-3. Unisource in GSM trial of mobile electronic banking and shopping; Mobile Communications; Mar. 20, 1997, 1-3, Anonymous.

Dynamic Mobile Data Announces Mobile Server Wireless Solution For Enterprise and internet Access; Mar. 1999, pp. 1-2, Anonymous.

Philip R. Cohen, Adam Cheyer, Michelle Wang, Soon Cheol Baeg; An Open Agent Architecture; Software Agent Papers, AAAI Spring Symposium 1994, pp. 1-129. Katia Sycara, Anandeep S. Pannu; The RETSINA Multiagent System: Towards Integrating Planning, Execution and Information Gathering; Proceedings of the Second International Conference on Autonomous Agents, May 1998, pp. 350-351.

ART-UNIT: 277

PRIMARY-EXAMINER: Homere; Jean R.

ATTY-AGENT-FIRM: Hickman Stephens Coleman & Hughes, LLP

#### ABSTRACT:

A system is disclosed that facilitates web-based comparison shopping in conventional, physical, non-web retail environments. A wireless phone or similar hand-held wireless device with Internet Protocol capability is combined with a miniature barcode reader (installed either inside the phone or on a short cable) and utilized to obtain definitive product identification by, for example, scanning a Universal Product Code (UPC) bar code from a book or other product. The wireless device transmits the definitive product identifier to a service routine (running on a Web server), which converts it to (in the case of books) its International Standard Book Number or (in the case of other products) whatever identifier is appropriate. The service routine then queries the Web to find price, shipping and availability information on the product from various Web suppliers. This information is formatted and displayed on the hand-held device's screen. The user may then use the hand-held device to place an order interactively.

17 Claims, 27 Drawing figures

Previous Doc Next Doc Go to Doc#

# First Hit Fwd Refs

# Previous Doc Next Doc Go to Doc#

Generate Collection Print

L3: Entry 20 of 21

File: USPT

Oct 17, 2000

DOCUMENT-IDENTIFIER: US 6134548 A

# \*\* See image for Certificate of Correction \*\*

TITLE: System, method and article of manufacture for advanced mobile bargain shopping

# Application Filing Date (1): 19981119

# Detailed Description Text (168):

An Egocentric Interface is a user interface crafted to satisfy a particular user's needs, preferences and current context. It utilizes the user's personal information that is stored in a central profile <u>database</u> to customize the interface. The user can set security permissions on and preferences for interface elements and content. The content integrated into the Egocentric Interface is customized with related information about the user. When displaying content, the Egocentric Interface will include the relationship between that content and the user in a way that demonstrates how the content relates to the user. For instance, when displaying information about an upcoming ski trip the user has signed up for, the interface will include information about events from the user's personal calendar and contact list, such as other people who will be in the area during the ski trip. This serves to put the new piece of information into a context familiar to the individual user.

# Detailed Description Text (169):

FIG. 10A describes the Intention Value Network Architecture implementation for the World Wide Web. For simplification purposes, this diagram ignores the complexity pertaining to security, scalability and privacy. The customer can access the Intention Value Network with any Internet web browser 1010, such as Netscape Navigator or Microsoft Internet Explorer, running on a personal computer connected to the Internet or a Personal Digital Assistant with wireless capability. See FIG. 17 for a more detailed description of the multiple methods for accessing an Intention Value Network. The customer accesses the Intention Value Network through the unique name or IP address associated with the Integrator's Web Server 1020. The Integrator creates the Intention Value Network using a combination of resources, such as the Intention Database 1030, the Content Database 1040, the Supplier Profile Database 1050, and the Customer Profile Database 1060.

# Detailed Description Text (170):

The Intention <u>Database</u> 1030 stores all of the information about the structure of the intention and the types of products and services needed to fulfill the intention. Information in this <u>database</u> includes intention steps, areas of interest, layout templates and personalization templates. The Content <u>Database</u> 1040 stores all of the information related to the intention, such as advice, referral information, personalized content, satisfaction ratings, product ratings and progress reports.

# <u>Detailed Description Text</u> (171):

The Supplier Profile <u>Database</u> 1050 contains information about the product and service providers integrated into the intention. The information contained in this <u>database</u> provides a link between the intention framework and the suppliers. It

includes product lists, features and descriptions, and addresses of the suppliers' product web sites. The Customer Profile <u>Database</u> 1060 contains personal information about the customers, such as name, address, social security number and credit card information, personal preferences, behavioral information, history, and web site layout preferences. The Supplier's Web Server 1070 provides access to all of the supplier's <u>databases</u> necessary to provide information and transactional support to the customer.

#### Detailed Description Text (172):

The Product Information Database 1080 stores all product-related information, such as features, availability and pricing. The Product Order Database 1090 stores all customer orders. The interface to this database may be through an Enterprise Resource Planning application offered by SAP, Baan, Oracle or others, or it may be accessible directly through the Supplier's Web Server or application server. The Customer Information Database 1091 stores all of the customer information that the supplier needs to complete a transaction or maintain customer records.

# Detailed Description Text (173):

FIG. 10B is a flowchart providing the logic utilized to create a web page within the Egocentric Interface. The environment assumes a web server and a web browser connected through a TCP/IP network, such as over the public Internet or a private Intranet. Possible web servers could include Microsoft Internet Information Server, Netscape Enterprise Server or Apache. Possible web browsers include Microsoft Internet Explorer or Netscape Navigator. The client (i.e. web browser) makes a request 1001 to the server (i.e. web server) for a particular web page. This is usually accomplished by a user clicking on a button or a link within a web page. The web server gets the layout and content preferences 1002 for that particular user, with the request to the database keyed off of a unique user id stored in the client (i.e. web browser) and the User profile database 1003. The web server then retrieves the content 1004 for the page that has been requested from the content database 1005. The relevant user-centric content, such as calendar, email, contact list, and task list items are then retrieved 1006. (See FIG. 11 for a more detailed description of this process.) The query to the <u>database</u> utilizes the user content preferences stored as part of the user profile in the User profile database 1003 to filter the content that is returned. The content that is returned is then formatted into a web page 1007 according to the layout preferences defined in the user profile. The web page is then returned to the client and displayed to the user 1008.

# Detailed Description Text (174):

FIG. 11 describes the process of retrieving user-centric content to add to a web page. This process describes 1006 in FIG. 10B in a more detailed fashion. It assumes that the server already has obtained the user profile and the existing content that is going to be integrated into this page. The server parses 1110 the filtered content, looking for instances of events, contact names and email addresses. If any of these are found, they are tagged and stored in a temporary holding space. Then, the server tries to find any user-centric content 1120 stored in various databases. This involves matching the tagged items in the temporary storage space with calendar items 1130 in the Calendar Database 1140; email items 1115 in the Email Database 1114; contact items 1117 in the Contact Database 1168; task list items 1119 in the Task List Database 1118; and news items 1121 in the News Database 1120. After retrieving any relevant user-centric content, it is compiled together and returned 1122.

# Detailed Description Text (177):

FIG. 12 describes the relationship between a user, his multiple personas and his multiple profiles. At the User Level is the User Profile 1200. This profile describes the user and his account information. There is one unique record in the <a href="https://database.com/database">database</a> for each user who has an account. Attached to each user are multiple Personas 1220, 1230 & 1240. These Personas are used to group multiple Profiles into

useful contexts. For instance, consider a user who lives in San Francisco and works in Palo Alto, but has a mountain cabin in Lake Tahoe. He has three different contexts in which he might be accessing his site. One context is work-related. The other two are home-life related, but in different locations. The user can create a Persona for Work 1220, a Persona for Home 1230, and a Persona for his cabin home 1240. Each Persona references a different General Profile 1250, 1260 and 1270 which contains the address for that location. Hence, there are three General Profiles. Each Persona also references one of two Travel Profiles. The user maintains a Work Travel Profile 1280 that contains all of the business rules related to booking tickets and making reservations. This Profile may specify, for instance, that this person only travels in Business or First Class and his preferred airline is United Airlines. The Work Persona references this Work Travel Profile. The user may also maintain a Home Travel Profile 1290 that specifies that he prefers to travel in coach and wants to find non-refundable fairs, since they are generally cheaper. Both the Persona for Home and the Persona for the cabin home point to the Home Travel Profile.

# Detailed Description Text (185):

FIG. 15 describes the process for generating the page that displays the agent's current statistics. When the user requests the agent statistics page 1510 with the client browser, the server retrieves the users' statistics 1520 from the users' profile database 1530. The server then performs the mathematical calculations necessary to create a normalized set of statistics 1540. The server then retrieves the formulas 1550 from the content database 1560 that will be used to calculate the user-centric statistics. Graphs are then generated 1570 using the generic formulas and that user's statistics. These graphs are inserted into a template to create the statistics page 1580. This page is then returned to the user 1590.

# Detailed Description Text (188):

FIG. 16 describes the algorithm for determining the personalized product ratings for a user. When the user requests a product report 1610 for product X, the algorithm retrieves the profiles 1620 from the profile database 1630 (which includes product ratings) of those users who have previously rated that product. Then the system retrieves the default thresholds 1640 for the profile matching algorithm from the content database 1650. It then maps all of the short list of users along several dimensions specified in the profile matching algorithm 1660. The top n (specified previously as a threshold variable) nearest neighbors are then determined and a test is performed to decide if they are within distance y (also specified previously as a threshold variable) of the user's profile in the set 1670 using the results from the profile matching algorithm. If they are not within the threshold, then the threshold variables are relaxed 1680, and the test is run again. This processing is repeated until

# Detailed Description Text (192):

FIG. 17 presents the detailed logic associated with the many different methods for accessing this centrally stored profile. The profile <a href="database">database</a> 1710 is the central storage place for the users' profile information. The profile gateway server 1720 receives all requests for profile information, whether from the user himself or merchants trying to provide a service to the user. The profile gateway server is responsible for ensuring that information is only given out when the profile owner specifically grants permission. Any device that can access the public Internet 1730 over TCP/IP (a standard network communications protocol) is able to request information from the profile <a href="database">database</a> via intelligent HTTP requests. Consumers will be able to gain access to services from devices such as their televisions 1740, mobile phones, Smart Cards, gas meters, water meters, kitchen appliances, security systems, desktop computers, laptops, pocket organizers, PDAs, and their vehicles, among others. Likewise, merchants 1750 will be able to access those profiles (given permission from the consumer who owns each profile), and will be able to offer customized, personalized services to consumers because of this.

# Detailed Description Text (193):

One possible use of the ubiquitous profile is for a hotel chain. A consumer can carry a Smart Card that holds a digital certificate uniquely identifying him. This Smart Card's digital certificate has been issued by the system and it recorded his profile information into the profile database. The consumer brings this card into a hotel chain and checks in. The hotel employee swipes the Smart Card and the consumer enters his Pin number, unlocking the digital certificate. The certificate is sent to the profile gateway server (using a secure transmission protocol) and is authenticated. The hotel is then given access to a certain part of the consumer's profile that he has previously specified. The hotel can then retrieve all of the consumer's billing information as well as preferences for hotel room, etc. The hotel can also access the consumer's movie and dining preferences and offer customized menus for both of them. The hotel can offer to send an email to the consumer's spouse letting him/her know the person checked into the hotel and is safe. All transaction information can be uploaded to the consumer's profile after the hotel checks him in. This will allow partners of the hotel to utilize the information about the consumer that the hotel has gathered (again, given the consumer's permission).

# Detailed Description Text (196):

FIG. 18 discloses the detailed interaction between a consumer and the integrator involving one supplier. The user accesses a Web Browser 1810 and requests product and pricing information from the integrator. The request is sent from the user's browser to the integrator's Web/Application Server 1820. The user's preferences and personal information is obtained from an integrator's customer profile database 1830 and returned to the Web/Application server. The requested product information is extracted from the supplier's product database 1840 and customized for the particular customer. The Web/Application server updates the supplier's customer information database 1850 with the inquiry information about the customer. The product and pricing information is then formatted into a Web Page 1860 and returned to the customer's Web Browser.

# <u>Detailed Description Text</u> (199):

FIG. 19 discloses the logic in accordance with a preferred embodiment processing by an agent to generate a verbal summary for the user. When the user requests the summary page 1900, the server gets the user's agent preferences 1920, such as agent type, rules and summary level from the user profile <u>database</u> 1930. The server gets the content 1940, such as emails, to do list items, news, and bills, from the content <u>database</u> 1950. The agent parses all of this content, using the rules stored in the profile <u>database</u>, and summarizes the content 1960. The content is formatted into a web page 1970 according to a template. The text for the agent's speech is generated 1980, using the content from the content <u>database</u> 1990 and speech templates stored in the <u>database</u>. This speech text is inserted into the web page 1995 and the page is returned to the user 1997.

# Detailed Description Text (204):

FIG. 21 illustrates a managing daily logistics display in accordance with a preferred embodiment. A user is greeted by an animated agent 2100 with a personalized message 2190. The user can select from various activities based on requirements, including travel 2110, household chores 2120, finances 2130 and marketplace activities 2140. Icons 2142 for routine tasks such as e-mail, calendaring and document preparation are also provided to facilitate rapid navigation from one activity to another. Direct links 2146 are also provided to allow transfer of news and other items of interest. Various profiles can be selected based on where the user is located. For example, work, home or vacation. The profiles can be added 2170 as a user requires a new profile for another location. Various items 2180 of personal information are collected from the user to support various endeavors. Moreover, permissions 2150 are set for items 2180 to assure information is timely and current.

# Detailed Description Text (220):

FIG. 25 is a block diagram of a back end server in accordance with a preferred embodiment. The back-end (2400 of FIG. 24) is a computer system that has the following software active: Intelligent Agents Coordinator (Munin) 2580, Information Prioritization Subsystem 2530, a set of continuously and periodically running information gathering and processing Intelligent Agents 2500, 2502 and 2504, User Profiles Database 2542 and supporting software, Information Channels Database 2542 and supporting software, communications software 2550, information transformation software 2560, and auxiliary software.

# Detailed Description Text (242):

6. Information Prioritization Subsystem decides what information is most relevant to the user based on their personal profile, <u>freshness of the information</u>, and the Intelligent Agent Coordinator's prior suggestions.

# Detailed Description Text (273):

The following code is written and executed in the Microsoft Active Server Pages environment in accordance with a preferred embodiment. It consists primarily of Microsoft Jscript with some <u>database</u> calls embedded in the code to query and store information in the <u>database</u>.

#### Detailed Description Paragraph Table (11):

LANGUAGE = "JScript" %> <% Response.Buffer = true; Response.Expires = 0; %> <html> <head> <Title>Create An Intention</title> </head> <body bgcolor="#FFE9D%"</pre> style="font-family: Arial" text="#000000"> <% //Define some variables upl = Server.CreateObject("SoftArtisans.FileUp") intention.sub.-- name = upl.Form ("intention.sub.-- name") intention.sub.-- desc = upl.Form("intention.sub.-desc") //intention.sub.-- name = Request.Form("intention.sub.-name") //intention.sub.-- desc = Request.Form("intention.sub.-desc") //intention.sub.-- icon = Request.Form("intention.sub.-- icon") submitted = upl.Form("submitted") items = new Enumerator(upl.Form) %> <% //Establish connection to the database objConnection = Server.CreateObject("ADODB.Connection") objConnection.Open("Maelstrom") %> <% //Check to see if the person hit the button and do the appropriate thing if (submitted == "Add/Delete") flag = "false" //loop through all the inputs while(!items.atEnd()) { i = items.item() //if items are checked then delete them if (upl.Form(i) == "on") { objConnection.Execute("delete from user.sub.-- intention where intention.sub.-- id =" + i); objConnection.Execute ("delete from intentions where intention.sub.-- id =" + i); objConnection.Execute ("delete from tools.sub.-- to.sub.-- intention where intention.sub.-- id =" + i) flag = "true" } items.moveNext ( ) } // if items were not deleted then insert whatever is in the text field in the <a href="database">database</a> if(flag == "false") { intention.sub.-- name.sub.-- short = intention.sub.-- name.replace(/ /gi, " ") objConnection.Execute("INSERT INTO intentions (intention.sub. -name, intention.sub. -- desc, intention.sub. -- icon) values(" + intention.sub. -- name + "`, `" + intention.sub.-- desc + "`, `" + intention.sub.-- name.sub.-- short + ".gif" + "`)") Response.write("the intention short name is " + intention.sub.-name.sub. -- short); upl.SaveAs("E:development/asp.sub.-- examples/"+ intention.sub.-- name.sub.-- short +".gif") } // Query the database to show the most recent items. rsCustomersList = objConnection.Execute("SELECT \* FROM intentions") %> <input type="Submit" name="return.sub.-- to.sub.-- mcp" value="Go to Main Control Panel" onclick="location.href=`default.asp`"> <form method="post" action="intention.sub.-- create.asp" enctype="multipar t/form-data" > <TABLE border=0> <font face="Arial" size="+1"><b>Enter in a new intention</b></font> <font face="Arial">Name:</font> <INPUT TYPE="text" name="intention.sub.-- name"> <font face="Arial">Description:</font><TEXTAREA name="intention.sub.-desc"></TEXTAREA> <font face="Arial">Icon Image:</font><INPUT TYPE="file" NAME="intention.sub.-- icon"</pre> size=40> <INPUT type="submit" name="submitted"

# <u>Detailed Description Paragraph Table (13):</u>

#include file="include/check.sub.-- authentication.inc" <HTML> <HEAD> <TITLE>mySite! Intentions List</TITLE> <SCRIPT LANGUAGE="JavaScript"> function intentionsList ( ) { this internalArray = new Array ( ); <% // establish connection to the database objConnection = Server.CreateObject("ADODB.Connection"); objConnection.Open("Maelstrom"); // create query intentionsQuery = objConnection.Execute("SELECT \* FROM intentions ORDER BY intention.sub. -- name asc"); %> // write out the options <% numOptions = 0 while (!intentionsQuery.EOF) { intentionName = intentionsQuery("intention.sub.-- name"); intentionIcon = new Array(2); this.internalArray(<%= numOptions%>) [0] = "<%= intentionName %>"; this.internalArray[<%= numOptions%>] [1] = "images/<%= intentionIcon %>"; <% numOptions++; intentionsQuery.moveNext(); %> <% } %> numIntentions = <%= numOptions%>; intentionArray = new intentionsList().internalArray; function selectIntention ( ) { for (i=0;i<numIntentions;i++) { if</pre> (IntentionsListSelect.options[i].selected) { intentionNameTextField.value = intentionArray[i] [0]; //intentionPicture.src = intentionArray [i] [1]; break; } } </SCRIPT> </HEAD> <BODY BGCOLOR="<%=Session("main.sub.-- background")%</pre> >" style="font-family: Arial"> <CENTER> -->-- <FORM NAME="intention.sub.-- list"> <TABLE FRAME="BOX" border=0 CELLPADDING="2" CELLSPACING="2"> <TR> <TD COLSPAN="3" STYLE="font: 20pt arial" ALIGN="CENTER"> <B>Add a mySite! Intention</B> </TD> </TR> <TR> <TD COLSPAN="3"> </TD> </TR> <TR> <TD width="100"> <font size="-1">Please Select An Intention You Would Like to Add to Your List</font> </TD> <TD colspan=2> <SELECT ID="(IntentionsListSelect" NAME="IntentionsListSelect" SIZE="10" style="font: 9pt Arial;" onClick="selectIntention()."> <% intentionsQuery.moveFirst(); for(j=0;j<numOptions;j++) { %> <OPTION VALUE="<%= intentionsQuery("intention.sub.-- id") %>" <% if (j == 0) { %> SELECTED <% } %>> <% = intentionsQuery("intention.sub.-- name") %> <% intentionsQuery.moveNext() } intentionsQuery.moveFirst(); %> </SELECT> </TD> </TR> <TR> <TD COLSPAN="3"> </TD></TD> </TR> <TR> <TD width="100"> <font size="-1">Customize the Intention name</font></TD> <TD COLSPAN=2"> <INPUT TYPE="text" NAME="intentionNameTextField" ID="intentionNameTextField" SIZE="30" VALUE="<%= intentionsQuery("intentio n.sub.-name") %>"> </TD> </TR> <TR> <TD COLSPAN="3"> </TD> </TR> <TD COLSPAN="3" ALIGN="CENTER"> <INPUT TYPE="button" NAME="intentionOKButton" VALUE=" OK " SIZE="10" ID="intentionOKButton" onClick="javaScript:top.opener.top.navframe.addAnIn tention();"> bsp; &nbs p; <INPUT TYPE="button" NAME="intentionCancelButton" VALUE="Cancel" SIZE="10" ID="intentionCancelButton" onClick="self.close();"> </TD> </TR> </TABLE> -->- </FORM> </CENTER> <% objConnection.Close(); %> </BODY> </HTML>

#### Other Reference Publication (1):

Chu-Sing Yang, Kun-da Wu, Chun-Wei Tseng; Support an Efficient Connection for Mobile IP; Proceedings, Ninth International Workshop on <u>Database</u> and Expert Systems Applications; Aug. 1998, IEE, Computer Society, pp. 514-519.

# Previous Doc Next Doc Go to Doc#